Downloaded from orbit.dtu.dk on: May 05, 2023

DTU Library

Evaluation of commercial ELISA kits for detection of antibodies against bovine atypical pestivirus

Larska, Magdalena; Polak, Mirosaw P.; Uttenthal, Åse; Alenius, Stefan; Ståhl, Karl; Zmudzinski, Jan F.; Liu, Lihong

Publication date:
2011

Link back to DTU Orbit

Citation (APA):
Larska, M., Polak, M. P., Uttenthal, Å., Alenius, S., Ståhl, K., Zmudzinski, J. F., & Liu, L. (2011). *Evaluation of commercial ELISA kits for detection of antibodies against bovine atypical pestivirus*. Abstract from 8th ESVV International Pestivirus Symposium, Hanover, Lower Saxony, Germany. http://www.pestivirus2011.de/

General rights
Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Evaluation of commercial ELISA kits for detection of antibodies against bovine atypical pestivirus

Magdalena Larska[1,3], Mirosław P. Polak[1], Åse Uttenthal[2], Stefan Alenius[3], Karl Ståhl[4], Jan F. Żmudziński[1], Lihong Liu[4]

[1]National Veterinary Research Institute (NVRI), Puławy, Poland
[2]National Veterinary Institute, Technical University of Denmark (VET-DTU), Lindholm, Denmark
[3]Swedish University of Agricultural Sciences (SLU), Uppsala, Sweden
[4] National Veterinary Institute (SVA), Uppsala, Sweden

A group of emerging bovine pestiviruses becomes a possible threat to Bovine Viral diarrhea virus (BVDV) control and eradication programs in the countries of their origin and in the new continents due to the lack of validated detection methods. The use of ELISA kits may be acheaper, time saving and less laborious option allowing screening for antibodies in large populations. Since test specific for emerging and new BVDV strains are still under preparation, the purpose of this work was to evaluate available BVDV antibody ELISA assays for their ability to detect antibodies against Hobi-like viruses. Analysis of a panel of sera obtained from calves experimentally inoculated with Hobi-like virus (isolated from a calf from Thailand) and BVDV type 1 strain using five different ELISA kits in comparison to neutralization test was performed. The specificity and sensitivity of the tests depended greatly on the level of antibodies with some tests enabling detection of specific antibodies against atypical pestivirus a week earlier than with other assays. Despite significant antigenic differences between atypical pestivirus and BVDV-1, the use of some tests may be recommended while no specific methods are available.

The study was supporte by the European Union Network of Excellence Epizone EPIZONE.